UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,873	01/23/2004	Michael J. Lembo	D0932-00432	6004

8933 7590 09/25/2006

DUANE MORRIS, LLP
IP DEPARTMENT
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103-4196

EXAMINER	
BLAKE, CAROLYN T	

ART UNIT	PAPER NUMBER
3724	

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/763,873	LEMBO ET AL.	
	Examiner	Art Unit	
	Carolyn T. Blake	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) *6,9,10,12 and 17-27* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7,8,11,13-16 and 28-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 December 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 6, 2006 has been entered.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 4, 5, 8, 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevie (6,119,439) in view of Baggot et al (6,913,673).

Regarding claim 1, Stevie discloses an apparatus capable of manufacturing insulation substantially as claimed, including: a conveying means for conveying a web; a rotary die cutting cylinder (22) located along a path of the conveying means and having at least one cutting rule (42) that severs said web, and having at least one of the group consisting of a perfing rule and a slicing rule (40), said slicing rule sized to partially cut through said insulation without cutting through a complete depth of said insulation; and an anvil (20) cooperative with said rotary die cutting cylinder (22) for partially slicing, perforating, or severing said web. Stevie fails to disclose the perfing rule has a plurality of unstepped regions comprising rectangular cutting portions along

an edge, with stepped regions comprising rectangular slots between adjacent ones of the rectangular cutting portions. However, Baggot et al disclose a perfing rule (134) with a cutting edge (142) as claimed. The Baggot et al cutting edge would create a different perforation line in a work piece than the Stevie cutting edge. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a perfing rule with rectangular teeth, as taught by Baggot et al, on the Stevie apparatus in order to create a desired perforation line on a work piece.

Regarding claim 4, Stevie discloses the rotary die cutting cylinder (22) includes three perfing or slicing rules (20) and one cutting rule (42).

Regarding claim 5, Stevie discloses the rotary die cutting cylinder (22) includes two cutting rules (42) and six perfing rules (40) with steps (46) along a length thereof. The teeth (40) of the Stevie reference can be considered "steps" as claimed because they form an uneven, discontinuous, jagged cutting edge.

Regarding claim 8, Stevie discloses wherein the perfing or slicing rules (40) and at least one cutting rule (42) are removable. See the fasteners attaching the rules in FIG 1.

Regarding claim 28, Stevie discloses the rotary die cutting cylinder (22) is oriented relative to the conveying means so that the web is partially sliced, perforated, or severed transversely.

Regarding claims 29 and 30, the ratio of unstepped region width to stepped region width appears to be 2:1 in the Baggot et al device. See FIG 15. To the extent this can be argued, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to vary the ratio in order to create a desired perforation line on a work piece.

Regarding claim 31, Stevie discloses the anvil (20) is a cylindrical roller.

Regarding claim 32, Stevie discloses the anvil (20) has a flat cutting surface (such as 26).

Regarding claim 33, the Stevie rotary die cutting cylinder would inherently compress insulation during cutting.

Claim Rejections - 35 USC § 103

4. Claims 1-5, 8, 28-31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya (4,781,091) in view of Stevie and Baggot et al.

Regarding claim 1, Nakaya discloses an apparatus capable of manufacturing insulation substantially as claimed including: a conveying means (4) for conveying a web; a rotary die cutting cylinder (2) located along a path of the conveying means (4) and having one slicing rule (8) and at least one cutting rule (8); and an anvil (3) cooperative with said rotary die cutting cylinder (2) for severing said web.

Nakaya fails to disclose a perfing rule or a slicing rule that partially cuts through the insulation. Stevie discloses a rotary cutting cylinder (22) having at least one cutting rule (42) that severs and at least one perfing rule or slicing rule (40) that partially cuts through a work piece. The Stevie cutting cylinder and arrangement of perfing and cutting blades creates a different cutting pattern on the work product than that created by the Nakaya cutting cylinder. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include perfing or slicing

rules, as taught by Stevie, with the Nakaya cutting cylinder and apparatus for the purpose of creating a different work product.

Still, the modified Nakaya device fails to disclose the perfing rule has a plurality of unstepped regions comprising rectangular cutting portions along an edge, with stepped regions comprising rectangular slots between adjacent ones of the rectangular cutting portions. However, Baggot et al disclose a perfing rule (134) with a cutting edge (142) as claimed. The Baggot et al cutting edge would create a different perforation line in a work piece than the modified Nakaya cutting edge. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a perfing rule with rectangular teeth, as taught by Baggot et al, on the modified Nakaya apparatus in order to create a desired perforation line on a work piece.

Regarding claim 2, Nakaya discloses two adjacent conveyor belts (4 and 5).

Regarding claim 3, Nakaya discloses the rotary die cutting cylinder (2) and anvil (3) are located intermediate the two conveyor belts (4 and 5).

Regarding claim 4, Stevie discloses the rotary die cutting cylinder (22) includes three perfing or slicing rules (20) and one cutting rule (42).

Regarding claim 5, Stevie discloses the rotary die cutting cylinder (22) includes two cutting rules (42) and six perfing rules (40) with steps (46) along a length thereof. The teeth (40) of the Stevie reference can be considered "steps" as claimed because they form an uneven, discontinuous, jagged cutting edge.

Regarding claim 8, the rules of Stevie are removable. See the fasteners securing the rules in FIG 1.

Regarding claim 28, Nakaya discloses the rotary die cutting cylinder (2) is oriented relative to the conveying means so that the web is severed transversely.

Regarding claims 29 and 30, the ratio of unstepped region width to stepped region width appears to be 2:1 in the Baggot et al device. See FIG 15. To the extent this can be argued, it would have been obvious to one of ordinary skill in the art at the time the invention was made to vary the ratio in order to create a desired perforation line on a work piece.

Regarding claim 31, Nakaya discloses the anvil (3) is a cylindrical roller.

Regarding claim 33, the Nakaya rotary die cutting cylinder would inherently compress insulation during cutting.

5. Claims 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevie in view of Baggot et al as applied to claim 1 above, and further in view of the following.

Stevie fails to disclose the dimensions of the device. However, to create a cutting device with the dimensional parameters claimed would have been obvious to one of ordinary skill in the art for the purpose of spatial constraints, work piece dimensions, or available tooling.

6. Claims 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya in view of Stevie and Baggot et al as applied to claim 1 above, and further in view of the following.

The modified Nakaya device fails to disclose the dimensions of the device. However, to create a cutting device with the dimensional parameters claimed would

have been obvious to one of ordinary skill in the art for the purpose of spatial constraints, work piece dimensions, or available tooling.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stevie in view of Baggot et al as applied to claims 1 and 11 above, and further in view of the following.

The modified Stevie device teaches six perfing or slicing rules (40) and two cutting rules (42), but fails to disclose the pattern of blades disclosed and the dimensions of the device. Varying the type, number, and pattern of the blades creates a different work product. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a different pattern of rules for the purpose of creating a different work product. In addition, to create a cutting device with the dimensional parameters claimed would have been obvious to one of ordinary skill in the art for the purpose of spatial constraints, work piece dimensions, or available tooling.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya in view of Stevie and Baggot et al as applied to claims 1 and 11 above, and further in view of the following.

Stevie discloses six perfing or slicing rules (40) and two cutting rules (42). The modified Nakaya invention still fails to disclose the pattern of blades disclosed and the dimensions of the device. Varying the type, number, and pattern of the blades creates a different work product. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a different pattern of rules for

the purpose of creating a different work product. In addition, to create a cutting device with the dimensional parameters claimed would have been obvious to one of ordinary skill in the art for the purpose of spatial constraints, work piece dimensions, or available tooling.

9. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya in view of Stevie and Baggot et al as applied to claim 1 above, and further in view of Ohara (5,695,105).

The modified Nakaya device fails to disclose means for tearing. However, Ohara discloses means for automatically tearing separable segments apart wherein the tearing means includes for conveying a first and second adjacent separable segments at different speeds to tear the first and second segments apart from each other. See col. 1, lines 33-40. This method could be easily implemented in the Nakaya device due to the location of the two conveyors (4 and 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to move the Nakaya conveyors at different speeds, as taught by Ohara, for the purpose of separating segments.

Response to Arguments

10. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn T. Blake whose telephone number is (571) 272-

4503. The examiner can normally be reached on Monday to Friday, 8:00 AM to 5:30 PM, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CB
September 7, 2006

BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER